

Annotated Bibliography – General Education

Note: The following list is limited to a small selection of leading articles on research about general education reform, student and faculty perspectives on general education, and effective teaching practices in general education.

Awbrey, S. M. (2005). "General education reform as organizational change: Integrating cultural and structural change." *The Journal of General Education*, 54(1), 1-21.

Awbrey argues that general education reform efforts, to be effective, must first identify cultural perspectives and foster changes in institutional culture before seeking structural changes such as reorganization of curriculum. To assist in such a task, the article introduces a framework of organizational culture that operates at three levels: structural artifacts (e.g. distribution requirements or writing across the curriculum programs); models and their underlying values and beliefs about "what it means to be an education person (e.g. "great books," "scholarly discipline," or "effective citizen" approaches); paradigmatic assumptions about "what can be known and how we develop knowledge" (e.g. positivism, pragmatism, or constructivism). In addition, the article introduces an analogous framework of organizational learning that operates at three levels: "single-loop learning" that is knowledge additive but does not alter underlying values or beliefs; "double loop learning" that is reflective and reshapes models and beliefs; and "triple-loop learning" that is transformational insofar as it alters how members view themselves and their organization. Missing from the article, however, are any empirical case studies that illustrate the efficacy of the proposed models or document exactly how "unsuccessful" reform efforts have failed to follow the integrative approach suggested.

Bourke, B., Bray, N. J., & Horton, C. C. (2009). "Approaches to the core curriculum: An exploratory analysis of top liberal arts and doctoral-granting institutions." *The Journal of General Education*, 58(4), 219-240.

This article provides an analysis of the current context of general education requirements among liberal arts and doctoral-granting institutions, with focus on the two dominant approaches to general education: use of core curriculum and use of distribution requirements. After a useful overview of the historical evolution and role of general education, the study analyzes approaches used by the top twenty-five institutions in each category (liberal arts, doctoral-granting), as ranked by *U.S. News and World Report* in 2004. The findings indicate that the majority of institutions in both categories use the distribution requirement approach, although liberal arts institutions vary more widely in their approaches and tend to emphasize "holistic development of the student" more than research-oriented universities. The article notes that general education is in flux, with more research needed to ascertain the extent to which other institutions follow the approaches of the "top-tier," which approaches work best and to what extent "effectiveness" is reflective of institutional missions and culture, rather than a general model. In predictable fashion, the authors state that general education "is likely to face subsequent waves of reform as higher education" evolves and the world changes.

Gaff, J. G. (1980). "Avoiding the potholes: Strategies for reforming general education." *Educational Record*, 61(4), 50-59.

Gaff's classic article appeared during the peak of reform efforts in the late 1970s and early to mid-1980s. It argues that "strategies for curricular change are as important as the substance," and it presents, in succinct fashion, 43 common strategic problems or "potholes" that reformers should be careful to avoid. Though dated in some respects – for instance, hardly anyone these days would agree that general education is "only cognitive" and doesn't also include qualities such as communication skills, critical thinking, problem-solving, etc. – the article nonetheless contains many crucial insights that every reform effort ought to consider carefully before "traveling the road" of general education reform. Perhaps most prescient is the first pothole discussed: that the best reform effort is not the importation of an outside model but instead a "homegrown" program designed according to the "institution's character, the strengths and weaknesses of its faculty, and the needs of its students."

Hachtmann, F. (2012). "The process of general education reform from a faculty perspective: A grounded theory approach." *The Journal of General Education*, 61(1), 16-38.

Hachtmann outlines a theory of institutional change that explains the process of implementation of new general education programs at major research universities from a faculty perspective. The study is explicitly limited to one case study of a research-focused, land-grant institution in the Midwest, although it provides an important foundation for future research on a topic that has heretofore been neglected but has significant implications for general education reform efforts. Through use of personal interviews with faculty directly involved in the reform effort, the author identifies a five-phase process from calling for change to populating the program, and notes that faculty buy-in is essential for all five phases (the faculty in the study were only active in the last four phases), as is faculty presence in key leadership roles. The most important issue for faculty was the quality of education offered in the program, followed closely by its accessibility in terms of meaningful, manageable assessment of outcomes (i.e. is it possible for faculty to meet administrative assessment expectations and still maintain a high level of rigor?). The article considers additional factors such as program sustainability and marketability, and it includes a very useful outline of key findings that merits careful consideration (readers in a hurry simply can glance at pp. 28-33 and not miss a beat). The article ends by asking if the reform process was successful and how to determine this, and also by asking whether the process was worth it and, again, how this is to be determined. The author also notes that the study reaffirms other research indicating that the structure of large doctoral-research institutions hampers the ability of faculty to get involved and have buy-in, because their research is more valued and rewarded than teaching.

Hall, M. R., Culver, S. M., & Burge, P. L. (2012). "Faculty teaching practices as predictors of student satisfaction with a general education curriculum." *The Journal of General Education*, 61(4), 352-368.

This article presents findings of a survey of student perceptions of the general education program at Virginia Tech University, which is based on the AAC&U's four essential learning outcomes ([click here to view the outcomes](#)), and explores the relationship between student

satisfaction about the program and faculty teaching practices. The survey revealed that students found the learning outcomes to be important and also valued opportunities to develop the skills promoted by the outcomes. More significantly, the study suggests that student satisfaction with general education is enhanced by the following four teaching practices: setting high standards for student learning; encouraging students to make connections between classes and find commonalities across classes (both general education courses and major courses); providing opportunities for collaborative learning; and expressing concern for and actively supporting student learning and development in general. The article includes a useful summary of the AAC&U essential learning outcomes and “high impact educational practices,” and documents the survey approach and findings.

Harmes, J. C., & Miller, B. J. (2007). “What do college students think about general education and assessment?” Paper presented at the annual meeting of the Northeastern Educational Research Association, Rocky Hill, CT. Retrieved from http://www.jamesmadisonuniversity.org/assessment/research/faculty/harmes/Harmes_Miller_NERA07.pdf

Harmes and Miller present findings from their use of a student focus group format to ascertain student attitudes toward general education at an unnamed “mid-sized, mid-Atlantic university.” While its findings confirm results obtained in other, similar studies – namely that students perceive general education courses to be of low value, perceive faculty to be unenthusiastic in teaching such courses, and fail to connect individual courses goals with larger general education goals – the true value of this article is its affirmation of the veracity of using focus groups to identify student perceptions. The article outlines basic guidelines for successful focus group studies and discusses their significance.

Mirabella, R. M., & Balkun, M. M. (2011). “Developing a four-year integrated core curriculum: Advice for avoiding the pitfalls and building consensus for change.” *The Journal of General Education*, 60(4), 215-233.

This article discusses in detail a recent process of core curriculum reform at Seton Hall University. Of particular significance for consideration is the list of thirteen strategies for change at the end of the article, notably engaging faculty early in the process, ensuring overlap of curriculum reform and other faculty priorities on campus, providing faculty incentives, and involving key people at all levels.

Nelson Laird, T. F., & Garver, A. K. (2010). “The effect of teaching general education courses on deep approaches to learning: How disciplinary context matters.” *Research in Higher Education*, 51(3), 248-265.

Whereas most studies focus on students’ perceptions of general education or their experiences and performance in general education courses and programs, this article focuses on faculty approaches to general education. The study builds on Laird, Niskode-Dossett and Kuh (2009), by looking more specifically at how faculty approaches to general education courses vary across different disciplines, particularly concerning “deep approaches to learning.” By “deep approaches to learning,” the authors mean learning that goes beyond mere information and rote learning to “a personal commitment to understanding”

demonstrated through means such as “reading widely, drawing on multiple resources, discussing ideas, reflecting on the process of learning, and applying knowledge in real world situations,” as well as “attempts to integrate and synthesize information with prior learning and draw on multiple perspectives.” Using data from nearly 11,000 faculty members from 109 institutions (specifically, data from the 2007 Faculty Survey of Student Engagement), the authors find that faculty emphasis on “deep learning” in general education courses, and between general education and major-specific courses, varies noticeably by discipline. Therefore, general education reform efforts should be grounded in careful understanding of disciplinary differences in teaching practices and also differences in disciplinary context concerning the role of general education courses.

Nelson Laird, T. F., Niskode-Dossett, A. S., & Kuh, G. D. (2009). “What general education courses contribute to essential learning outcomes.” *The Journal of General Education*, 58(2), 65-84.

This study compares general education courses and non-general education courses to determine the extent to which faculty design courses to promote essential learning outcomes and to utilize effective pedagogical practices (note: the “outcomes” the authors have in mind are the [AAC&U essential learning outcomes](#)). Using data from the 2005 Faculty Survey of Student Engagement, the authors find that general education courses tend to emphasize intellectual skills and social and personal responsibility to a greater degree than higher division, non-general education courses, whereas the latter tend to emphasize use of technology, collaborative learning, and real-world applications more often than general education courses. Yet coordination between the two, in a manner that articulates a clear connection for students, is often lacking. The authors conclude that a greater degree of curricular coordination between general education and non-general education courses is needed to ensure that essential outcomes are achieved over the course of an undergraduate education.

Newton, R. R. (2000). “Tension and models in general education planning.” *The Journal of General Education*, 49(3), 165-181.

Newton suggests that few members of general education reform committees are adequately prepared, and argues that busy faculty and administrators should at least understand the main tensions likely to emerge, be aware of the predominant models that exist, and undertake an analysis of how different models fit different institutions. Four tensions are discussed: unity vs. fragmentation of knowledge – whether pursuit of knowledge is best left to distinct departments or should be a common enterprise that transcends disciplinary boundaries; breadth vs. depth of student learning; emphasis on faculty specialization vs. generalization (“teaching researchers” vs. “researching teachers”); and content centered on Western culture vs. diverse cultures. In terms of prevailing models, three are discussed, with a succinct overview of how each addresses the four tensions noted: the Great Books Model, which emphasizes “fundamental questions of life” and texts that “have stood the test of time,” with general education courses serving as interdisciplinary approaches that provide broad contexts and tools for integration; the Scholarly-Discipline Model, which emphasizes disciplines and specialization of knowledge, with general education courses serving as “rigorous introductory courses in the disciplines”; and the Effective Citizen Model, which

emphasizes the “needs of contemporary students....to live well and participate fully in the world of the 21st century,” with general education courses serving to provide pertinent information, explore its implications, and facilitate development of skills and values for citizenship (either as competent and “productive” members of society or as responsible change agents in the tradition of Dewey). These tensions and models can provide a context for analyzing existing general education programs and their assumptions, and envisioning different approaches.

Pittendrigh, A. (2007). “Reinventing the core: Community, dialogue, and change.” *The Journal of General Education*, 56(1), 34-56.

Pittendrigh’s article documents the process of general education reform at Montana State University and is essential reading for any reformer of general education. Based on key insights discussed in Awbrey (2005) and Gaff (1996), the article indicates that successful reform requires transformation of institutional culture grounded in campus-wide dialogue and faculty buy-in, and that such change takes time (six years in the case of Montana State). Specifically, using grant funds, Montana State began with an experimental, seminar program for incoming students, team-taught by tenured faculty and centered on cross-disciplinary inquiry. These courses brought numerous faculty members together to learn from each other and expose themselves to different approaches. These experiences informed shifts in values and assumptions, and the seminars became a launching point for a series of campus-wide dialogues about the purpose and value of undergraduate education at the institution. The dialogues, combined with additional curricular experiments and positive assessment results, culminated in a major overhaul of the general education program. Pittendrigh summarizes nicely the evolution of this process, including the pros and cons, and emphasizes the crucial importance of a sustained process of dialogue and revision grounded in faculty teaching experiences.

Tetreault, M. K., & Rhodes, T. (2004). “Institutional change as scholarly work: General education reform at Portland State University.” *The Journal of General Education*, 53(2), 81-106.

Tetreault and Rhodes – writing as PSU Provost and Vice Provost at the time – discuss the general education program at Portland State University after ten years in existence, with a specific focus on exploring disagreements about general education as reflective of underlying disagreements about higher education, namely its purposes, form, assumptions about human nature, and beliefs about learning. They utilize a framework that queries three primary areas of contention: institutional (“how much change do we need in higher education?”); epistemological (“how socially constructed is knowledge?” and “do we stress the knower or the known?”); and personal and relational (“how much do we recognize similarities or differences between self and other?” and “how has power corrupted these relations?”). The authors use the framework to parse the disagreements among faculty at PSU, concerning general education, as manifesting from faculty members’ different underlying identifications (relational, not fixed) and the ways these become privileged or threatened as the goals of the general education program come into conflict with other goals and pressures that inform faculty identities and positions (e.g. increasing disciplinarity and specializations, research focus, etc.). The article is significant insofar as it identifies a layer of cultural factors – and

provides a tool for analysis – that must be considered when addressing general education, which is deeper and more complex than is suggested by other research on the role of culture, for example Awbrey (2005).

Twombly, S. B. (1992). "Student perspectives on general education in a research university: An exploratory study." *The Journal of General Education*, 41, 238-272.

Twombly's now classic article remains significant. First, through its use of focus groups, it set the tone for many subsequent inquiries about student perceptions of general education. Second, the study focused on how students assign meaning to their education and learning process, highlights that this can differ widely from faculty and administrative intentions, and emphasizes that identification of the meaning students associate with general education is a key factor in evaluating program effectiveness. Third, the findings pinpoint two primary influences on student perceptions: their perception of the need or use of a course for future career or life plans, and the perceptions of others, notably their peers, advisors, and mentors. Finally, it is worth reading the article if only because of the many actual student quotes it contains, which offer valuable insights on a range of topics from how students perceive the purpose of general education to the decision-making strategies they employ when selecting courses.

University of North Dakota Bush General Education Study Team. (2004). *University of North Dakota Bush longitudinal study: What students tell us about cross-disciplinary general education goals and learning*. Retrieved from http://und.edu/academics/registrar/_files/docs/essential-studies/general-education-longitudinal-study.pdf

This study does what nearly every other study of student perceptions of general education doesn't do, but says ought to be done: it offers insights gathered from a longitudinal study. The study used interviews of students by a diverse team of faculty over a four-year period to ascertain student beliefs about their learning and perceptions of the general education program, including use of portfolios of student work to serve as talking points. Specifically, the study focused on student experiences in relation to the specific cross-disciplinary general education goals of the program, though other findings about the program in general emerged. Although the report contains mainly faculty summaries of the student interviews, with only some actual statements by students quoted, the findings offer a wealth of insights about how student perceptions and experiences with general education change over time. Perhaps the most intriguing finding, not evident in most "snapshot" surveys, is how students transformed their appreciation of general education courses from classes "to get out of the way quickly" (expressed at the end of year two) to classes that one should take "seriously" (expressed a year later) because the value of such classes only becomes apparent once one is immersed in a major and the connections between the two become evident. This shift is explained, in part, by the finding that most students did not begin to take their course work seriously until they began their majors courses, which "form the basis of their jobs." The report concludes with several recommendations, including the suggestion that institutions should create more opportunities for regular dialogue about general education, that general education goals should be explicit in course syllabi and integrated into courses at all levels, and that more

opportunities for student-faculty interaction should be promoted early on in student careers. Overall, this study is highly valuable and worth the time to peruse.

Vander Schee, B. A. (2011). "Changing general education perceptions through *perspectives* and the interdisciplinary first-year program." *International Journal of Teaching and Learning in Higher Education*, 23(3), 382-387.

This article presents findings about student perceptions of general education at a "public liberal arts college in the northeast" with less than 1,500 students. New students with less than 18 earned credit hours participated in first-year seminars, each with a specific theme, designed to build community, introduce students to academic and social life, and foster appreciation of the liberal arts general education curriculum. Students also participated in weekly *Perspectives* sessions in which faculty introduced students to various disciplines. Through use of surveys and analysis of student reflective writing, the study indicates that students in the seminars developed appreciation for the general education curriculum and found the *Perspectives* sessions to be highly valuable in introducing them to different disciplines and in helping them develop appreciation for scholarly approaches they otherwise would not have considered. While the results are suggestive, the article notes a need to query faculty perceptions and experiences, to document if student enrollment in particular general education courses increased as a result of exposure during the *Perspectives*, and to determine how student perceptions might shift over time.

Weissman, J., & Boning, K. J. (2003). "Five features of effective core courses." *The Journal of General Education*, 52(2), 150-174.

The authors present findings of a study of the effectiveness of the inquiry courses program at Saint Louis University. The courses are designed to fulfill core course requirements and are offered to small groups of freshman and sophomore students, taught by full-time faculty, and promote an "interactive, interdisciplinary mode that focuses on learning through inquiry and discovery." The study used focus groups of students to determine student expectations and whether goals were met, their satisfaction with courses, and their perceptions of faculty engagement and pedagogical approaches. The authors note that over time there emerged a pattern of pedagogical excellence centered on five key features that the most successful courses shared in common: development of community through collaborative learning; students being empowered to own their learning; connection of ideas with other disciplines and the real world; use of active experiences (e.g. writing, presentations, etc.) to assess student learning; and sharing in the experiences of the discipline, such as use of disciplinary modes of inquiry and thematic frameworks. The article includes several insightful quotes from students, and the findings support similar conclusions discussed by Hall, Culver, and Burge (2012).

For additional research, see the following resources:

General Education, Association of American Colleges and Universities: provides links to numerous resources, publications, and events on general education reform and effective teaching practices for general education courses. The AAC&U has been at the forefront of general education initiatives since the 1980s, and its site is a significant online hub for work on general education in higher education.
[url: <http://www.aacu.org/resources/generaleducation/>]

General Education, LEAP Campus Toolkit: presents numerous examples of innovative general education programs at different universities and colleges across the United States, in addition to basic tools for design and assessment of general education programs. The site is based on the Liberal Education and America's Promise (LEAP) initiative that "champions the importance of a twenty-first-century liberal education—for individual students and for a nation dependent on economic creativity and democratic vitality."
[url: <http://leap.aacu.org/toolkit/general-education>]

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